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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/726,325	12/01/2000	Charles C. Morehouse	10003484	1034

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

LEWIS, DAVID LEE

ART UNIT PAPER NUMBER

2673

DATE MAILED: 01/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/726,325

Applicant(s)

Morehouse

Examiner

David L. Lewis

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 31, 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 U.S.C. § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. **Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by O'Donnell , Jr. (6486875 B1).**
3. **As in claim 1, O'Donnell, Jr. teaches of an electronic pen for recording motion data relating to use of the pen, figures 1 and 2, comprising: a pen body, figure 1 item 3; a ball mounted in the pen body, figure 1 item 15; a sensor in the pen body, located proximate the ball, for detecting motion of the ball and converting the motion into corresponding electronic signals, figure 1 item 17, column 4 lines 1-15; and a memory in the pen body, electronically coupled to the sensor, for receiving the electronic signals and storing corresponding data related to the motion, figure 1 item 25, the data**

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including data points related to positions of the ball and enabling extrapolation to generate lines representing the motion of the ball, **column 4 lines 1-30**. Wherein the combination of directional and distance data from the sensors 17 in contact with ball 15 generate a series of vectors which allow the recording of written information by the pen. The microprocessor 23 is programmed to convert distance and directional data into digital data so that it can plot linear movement incrementally on X and Y axes so that the excursion of the ball 15 during writing is converted into useful data. The memory cartridge 25 is designed to store data as it is created by the pen and processed by the microprocessor 23. Therefore O'Donnell utilizes a series of vectors generated by the pen sensors to plot linear movement incrementally in the X/Y plane, wherein the extrapolation is implemented by the conversion process that converts distance and direction data into digital data that illustrates the hand written data.

4. **As in claim 11, O'Donnell, Jr. teaches of** a method for recording motion data relating to use of a pen having a pen body, **figure 1 item 3**, a ball mounted in the pen body, **figure 1 item 15**, a memory, **figure 1 item 25**, and a sensor located proximate the ball, **figure 1 item 17**, comprising: detecting motion of the ball using the sensor, **column 4 lines 1-30**; converting the motion into corresponding electronic signals, **column 4 lines 1-30**; receiving the electronic signals, **column 4 lines 1-30**; and storing in memory, **column 4 lines 1-31**, based upon the electronic signals, corresponding data related to the motion, **column 4 lines 1-31**, the data including data points related to positions of the

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ball and enabling extrapolation to generate lines representing the motion of the ball, **column 4 lines 1-30**. Wherein the combination of directional and distance data from the sensors 17 in contact with ball 15 generate a series of vectors which allow the recording of written information by the pen. The microprocessor 23 is programmed to convert distance and directional data into digital data so that it can plot linear movement incrementally on X and Y axes so that the excursion of the ball 15 during writing is converted into useful data. The memory cartridge 25 is designed to store data as it is created by the pen and processed by the microprocessor 23. Therefore O'Donnell utilizes a series of vectors generated by the pen sensors to plot linear movement incrementally in the X/Y plane, wherein the extrapolation is implemented by the conversion process that converts distance and direction data into digital data that illustrates the hand written data.

5. **As in claims 2 and 12, O'Donnell, Jr.** teaches of further including a removable ink cartridge, disposed with the pen body, for applying ink to the ball, column 3 lines 60-67, wherein the ink reservoir is as associated with that of conventional ball point pens known for their replaceable ink cartridge. **As in claims 3 and 13, O'Donnell, Jr.** teaches further including a port, located on the pen body and electronically coupled to the memory, for use in transferring the data from the memory to an external device, figure 1 item 27. **As in claims 4 and 14, O'Donnell, Jr.** teaches further including a circuit, electronically coupled to the sensor and the memory, for sampling the sensor at a particular rate and controlling transmission of a sampled electronic signal from the sensor to the

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memory, figure 1 item 23, column 4 lines 12-15, wherein real time or delayed transmission implies a rate. **As in claims 5 and 15, O'Donnell, Jr.** teaches of further including a module for receiving the data and for converting the data into a visual representation of the motion of the ball, column 3 lines 1-30 **As in claims 6 and 16, O'Donnell, Jr.** teaches of further including a module for storing the visual representation, column 4 lines 48-54. **As in claims 7 and 17, O'Donnell, Jr.** teaches of wherein the sensor includes dual sensors for detecting directions from which orthogonal ball motions can be reconstructed, figure 1 item 17. **As in claims 8 and 18, O'Donnell, Jr.** teaches wherein the memory stores as the data coordinates representing the directions from which the orthogonal ball motions can be reconstructed, column 4 lines 23-41. **As in claims 9 and 19, O'Donnell, Jr.** teaches of wherein the memory stores an indication of a set of the motion data and a default location for a start of the corresponding motion, column 4 lines 1-41, wherein said features are inherent to the device as well known in the art. **As in claim 10 and 20, O'Donnell, Jr.** teaches wherein the memory comprises an atomic resolution storage memory, **figure 1 item 25**, wherein said memory is inclusive to all memory known in the art able to facilitate fine resolution memory as with atomic resolution storage.

6. **Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Morishita et al. (6335727).**

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7. **As in claim 1, Morishita et al. teaches of an electronic pen for recording motion data relating to use of the pen, figures 1 and 2, comprising: a pen body, figure 5 item 10; a ball mounted in the pen body, figure 5 item 60, column 12 lines 45-55, column 14 lines 12-25; a sensor in the pen body, located proximate the ball, for detecting motion of the ball and converting the motion into corresponding electronic signals, figure 5 item 12; and a memory in the pen body, electronically coupled to the sensor, for receiving the electronic signals and storing corresponding data related to the motion, figure 5 item 13, the data including data points related to positions of the ball and enabling extrapolation to generate lines representing the motion of the ball, figures 8, 25, 26, and 36.**

Response to Arguments

8. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection. See the new rejection over O'Donnell, Jr., Morishita et al.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. As in claim 11, Morishita et al. in view of O'Donnell, Jr, wherein the pen of figure 5,

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Morishita, has the capacity to utilize an ink or normal writing means, column 12 lines 45-55, in conjunction with a position recognizing section, column 13 lines 1-10. An obviousness type rejection in view of O'Donnell Jr. is possible, wherein O'Donnell Jr. teaches the implementation of the pen tip and position recognizing section as suggested by Morishita et al.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **David L. Lewis** whose telephone number is **(703) 306-3026**. The examiner can normally be reached on MT and THF from 8 to 5. If attempts to reach the examiner by telephone are

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unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached on (703) 305-4938. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:


Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Examiner: David L. Lewis

January 9, 2003